

Title (en)

ORGANIC BOTTOM ANTI-REFLECTIVE COMPOSITION AND PATTERNING METHOD USING THE SAME

Title (de)

ANTIREFLEKTIVE ZUSAMMENSETZUNG MIT ORGANISCHEM BODEN UND STRUKTURIERUNGSVERFAHREN UNTER DEREN VERWENDUNG

Title (fr)

COMPOSITION ANTIREFLET A PARTIE INFERIEURE ORGANIQUE ET PROCEDE DE FORMATION DE MOTIFS FAISANT APPEL A LADITE COMPOSITION

Publication

**EP 1578855 A1 20050928 (EN)**

Application

**EP 03774253 A 20031118**

Priority

- KR 0302479 W 20031118
- KR 20020074262 A 20021127

Abstract (en)

[origin: WO2004048458A1] The present invention relates to an organic anti-reflective composition and a patterning method using the same, more particularly to an organic anti-reflective composition comprising a crosslinking agent, a light absorbing agent, a thermal acid generator, an organic solvent and an adhesivity enhancer, and a patterning method using the same. The organic anti-reflective composition of the present invention can solve the standing wave effect due to change in optical properties and resist thickness of the bottom film on the wafer, prevent change of critical dimension (CD) due to scattered reflection, and prevent pattern collapse of photosensitizer on top of the organic anti-reflective film, and thus can form stable 64M, 256M, 512M, 1G, 4G and 16G DRAM ultrafine pattern and of improving product yield.

IPC 1-7

**C08K 5/107**

IPC 8 full level

**C08K 5/107** (2006.01); **C08K 5/00** (2006.01); **C08K 5/05** (2006.01); **C08K 5/41** (2006.01); **C08L 25/18** (2006.01); **G03F 7/09** (2006.01); **C08K 5/42** (2006.01); **C08L 33/14** (2006.01)

CPC (source: EP KR US)

**C08K 5/0008** (2013.01 - EP US); **C08K 5/0041** (2013.01 - EP US); **C08K 5/107** (2013.01 - KR); **C08L 25/18** (2013.01 - EP US); **G03F 7/091** (2013.01 - EP US); **C08K 5/42** (2013.01 - EP US); **C08L 33/14** (2013.01 - EP US)

C-Set (source: EP US)

1. **C08K 5/0041** + **C08L 33/10**
2. **C08L 25/18** + **C08L 2666/04**

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

**WO 2004048458 A1 20040610**; AU 2003284724 A1 20040618; CN 100379807 C 20080409; CN 1735655 A 20060215; EP 1578855 A1 20050928; EP 1578855 A4 20071024; JP 2006508388 A 20060309; JP 4318642 B2 20090826; KR 100832247 B1 20080528; KR 20040046350 A 20040605; TW 200413850 A 20040801; TW I313790 B 20090821; US 2006153987 A1 20060713

DOCDB simple family (application)

**KR 0302479 W 20031118**; AU 2003284724 A 20031118; CN 200380104374 A 20031118; EP 03774253 A 20031118; JP 2004555097 A 20031118; KR 20020074262 A 20021127; TW 92133101 A 20031125; US 53651205 A 20050525